Dmytro **Bogatov**

PhD student at Boston University

Database Security, Secure Range Query protocols, ORE / OPE schemes, ORAM

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i Born in Ukraine in 1996



I have graduated from Lyceum in Kyiv and enrolled at WPI. During my undergraduate program, I have worked on a number of internships and have completed many research and industry oriented projects. I have graduated from WPI in 2017 with nearly perfect GPA and have enrolled at BU for 5-years PhD program in Data Science. For the first two years I am completing the terminal Master's requirements and doing research. Currently, I am looking for a research internship in the area of Database Security. I am particularly interested in Secure Range Query protocols, ORE / OPE schemes, ORAM.



📑 Skills

Programming Languages C#, TypeScript / JavaScript, Python, Java, C/C++, HTML, SQL, ŁTFX, Go, Bash, x86 ASM

.NET Core, ASP MVC, xUnit, Angular Frameworks Common skills git, docker, bash, console, ŁTFX, VS Code

Ubuntu / CoreOS, Kubernetes, CI / CD, infrastructure automation, NGINX, load balancing DevOps Grad classes Advanced Algorithms, Cryptography, Advanced Database Systems, Advanced Operating Systems, Distributed Systems, Compiler Design, Applied Cryptography, Optimization Methods



2013 High school (Lyceum 157 in Kyiv) graduation with high distinction. GPA 4.00.

2017 Bachelor of Science in Computer Science from WPI with high distinction. GPA 3.98.

Doctor of Philosophy in Computer Science (Data Science) from BU. Current GPA 4.00. Expected 2023

PUBLICATIONS

[BKR19] D. Bogatov, G. Kollios, and L. Reyzin. "A Comparative Evaluation of Order-Revealing Encryption Schemes and Secure Range-Query Protocols". In: PVLDB 12 (2019).

[Bog17] D. Bogatov. "Analysis of a Dynamic Voluntary Contribution Mechanism Public Good Game". In: IPE Journal 26 (2017).

D. Bogatov and J. R. Hennessy. "Data MATTERS: Customizing Economic Indices to Measure State Competitiveness". In: [BH16] WPI Library (2016).

[Nur+15] B. Nurbekov, D. Bogatov, J. S. Xu, and R. J. O'Brien. "Investment Trading And Risk Management: Scientifically Developing and Analyzing Trading Systems". In: WPI Library (2015).

Conferences

- > 2016 IEEE MIT Undergraduate Research Technology Conference
- > 23rd Annual Issues in Political Economy Conference
- > Second Workshop on Encryption for Secure Search and other Algorithms



Paper reviews

2019 ICDE



PROFESSIONAL EXPERIENCE

Present September 2017

PhD Student / Research Assistant, Boston University, Boston, MA, USA

> Research in academia (see publications section)

> Teaching — lecturing, office hours, grading exams

research classes conferences seminars teaching

August 2017 February 2017

Web / DevOps developer, REDWOODEDA, Shrewsbury, MA, USA

- > Developed a large-scale micro-services application status.dbogatov.org
- > Developed the solution for a company, then open-sourced

.NET Core web devops C# PostgreSQL

May 2017

Co-founder / web developer, Shevastream, Kyiv, Ukraine

January 2016

- > Managing a small retail-oriented startup shevastream.com
- > Developed a full-featured e-commerce website (C# / .NET Core / Linux)

startup .NET Core web C# PostgreSQL

October 2016 January 2016

Web developer, Worcester Polytechnic Institute, Worcester, MA, USA

- > Developed a large-scale web system MATTERS.mhtc.org
- > Led server-side development (Java / Spring)
- > Assisted in front-end technical development

Spring framework | Java | statistics | data analysis | web | PostgreSQL |

August 2015 Jun 2015

Web developer / Quantitative analyst, TRADESTATION SECURITIES, Plantation, FL, USA

- > Led a team of five interns
- > Designed and developed a Web Dashboard for clients
- > Worked on .NET stack (ASP.NET / MS SQL / Windows Server)

NET ASP MVC MS SQL data analysis web

December 2016 September 2014

Senior Teaching Assistant, Worcester Polytechnic Institute, Worcester, MA, USA

- > Assisted in teaching graduate and undergraduate CS classes
- > Held office hours, proctored exams, conducted labs, graded assignments

teaching exams lectures classes

PROJECTS

ORE BENCHMARK

May 2017 — October 2017

ore.dbogatov.org white paper

A Comparative Evaluation of Order-Preserving and Order-Revealing Schemes and Protocols

C# NET Core research ORE range query protocols

STATUS SITE FEB 2017 — PRESENT

☑ status.dbogatov.org ☑ source code

A multi-component system for collecting and analyzing the infrastructure health

C# .NET Core ASP MVC TypeScript Kubernetes micro-services

SHEVASTREAM

JANUARY 2016 — MAY 2017

☑ shevastream.com ☑ source code

A small retail-oriented startup that sells custom-designed notebooks

startup .NET Core web C# PostgreSQL

MATTERS

JANUARY 2016 — OCTOBER 2016

☑ MATTERS.mhtc.org ☑ source code

A web tool that lets users interactively do an extensive analysis over economic data collected for all states

Spring framework Java statistics data analysis web PostgreSQL

LOTS OF OTHER DIFFERENT PROJECTS

ALL THE TIME

see my portfolio see me on GitHub

I do different projects all the time. See all of them on my personal website 🗹 dbogatov.org

have fun







English Ukrainian Russian



- > Chair's Fellowship at BU
- "Outstanding Junior" at WPI
- > Dean's List all semesters at WPI
- > Charles O. Thompson Scholar at WPI
- > The Future of Ukraine project fair award at Kyiv
- Officer / IT manager at RSSA organization at WPI
- > Career Fair Volunteer at WPI

66 Referees

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